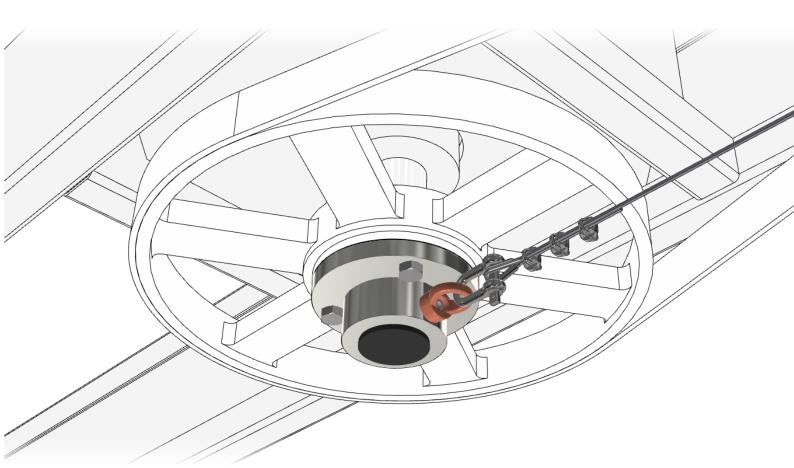


# The optimal solution to avoid backward rotation of your fan drive system







#### WHY TO USE AN ANTI-ROTATION DEVICE.

Fan drives, especially the ones installed in air-cooled heat exchangers (ACHE), both forced and induced, can lead to back-drafting currents when not in operation.

This phenomenon causes fan reverse rotation and windmilling: in this condition, motor start-up results in high torque on fan, supporting structure and drive system components, especially the ones driven by transmission belts, that can get damaged as a result.

The best solution to prevent these kinds of phenomena on fans driven by transmission belts, is supported by the application of the anti-rotation device *XR Lock* on driven pulley.

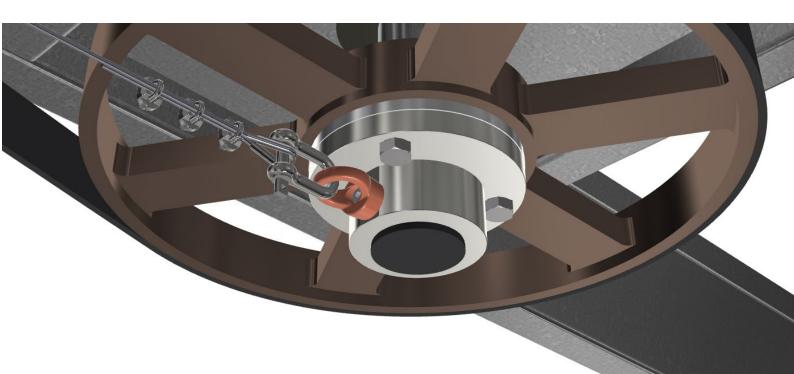
#### THE OPTIMAL SOLUTION TO SAVE BELTS.

Generally, the first components of drive systems getting damaged by hard starts are transmission belts.

Thanks to the Cofimco XR Lock, maintenance and costs related to belt replacement are noticeably reduced.

#### SAFETY INCREASE WITHOUT UNEXPECTED ROTATION

During maintenance operations on fans or drive systems, workers are close to rotating elements. A sudden rotation of the fan due to possible wind-milling, expose the workers to safety hazards which are minimized by the Anti-Rotation Device.





#### **EASY INSTALLATION**

Cofimco XR Lock is composed of a one-way clutch which allows the fan shaft to rotate in only one direction. XR Lock is easy to install, being fixed on the bushing of driven pulley. It is available for all common bushing types, from the Taper Lock (3020, 3525 etc.) to QD bushing (E, F and J). XR Lock can also be installed directly on shaft or to be customized if required.

Thanks to its versatility, Cofimco Anti-Rotation Device can be used on new and already existing ACHE fan drives.

#### NO MAINTENANCE REQUIRED

XR Lock is lubricated-for-life therefore, no particular maintenance is required.

#### **CERTIFIED TO STANDARD ATEX 2014-34-EU**

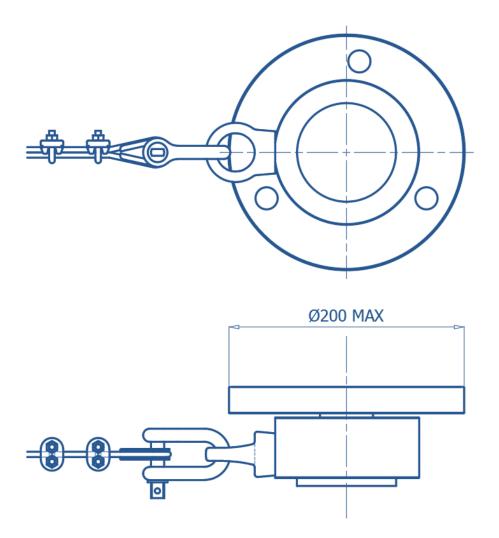
Cofimco XR Lock is designed for Atex area II 2G/D c IIC Tx



#### **COMPACT DESIGN**

The compact design of XR Lock allows the installation below driven pulleys and in most cases without having to modify the protection fences.





### **COFIMCO XRLOCK CHARACTERISTICS**

- TEMPERATURE RANGE: -20°C / 120°C

  For lower temperature, special lubricant is available.
- MAXIMUM FAN DIAMETER: 6096mm 20 feet
  Application on larger diameters, can be evaluated.
- **MAXIMUM ROTATION SPEED: 1500 RPM**
- MAXIMUM TORQUE: 325 Nm

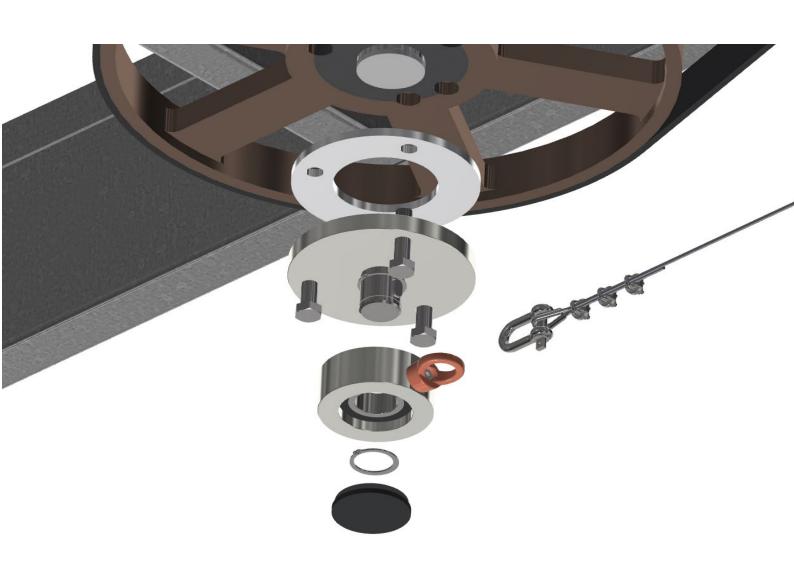
  The value indicated refers to maximum torque in back-stop phase.
- WEIGHT: 7 kg



## COFIMCO XR LOCK - ANTI-ROTATION DEVICE ADVANTAGES

Thanks to its simple but strong design and its easy customization, Cofimco Anti-Rotation Device allows a large series of advantages.

- ► Eliminates hard-starts of motor caused by reverse rotation of fan during wind-milling
- ▶ Avoids damages on belts and rotating components during start-up
- ▶ Limits safety hazards during general ACHE maintenance operations
- ▶ Designed for ATEX area II 2G/D c IIC Tx
- ► Easy mount on taper bushing of driven pulleys
- ► Compatible with all pulley bushings or cylindric shaft
- ► Customized solution for installation availbale
- ► No lubrication required
- ► Suitable for forced and induced draft applications
- Suitable for clockwise and anti-clockwise rotation
- ► Its compact design allows installation without having to modify protection fences





#### **COFIMCO SRL**

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